

We Claim:

1. A bioactive fraction from extracts of *Salicornia* species.
2. A fraction as claimed in claim 1 wherein the *Salicornia* species comprises of *Salicornia brachiata*.
- 5 3. A fraction as claimed in claim 2 wherein the *Salicornia brachiata* is a fully matured plant.
4. A fraction as claimed in claim 1 wherein the extract comprises extracts from *Salicornia* plant part selected from the group consisting of whole plant without root, roots, spikes, husk and seeds.
- 10 5. A fraction as claimed in claim 1 wherein the extract comprises an aqueous plant extract with 100% water.
6. A fraction as claimed in claim 1 wherein the extract comprises an alcohol extract.
7. A fraction as claimed in claim 1 wherein the alcohol is selected from methanol and butanol.
- 15 8. A fraction as claimed in claim 1 wherein the bioactive fraction is obtained from an extract of *Salicornia brachiata* in methanol: water in a range of 95:5 to 1:1.
9. A fraction as claimed in claim 1 wherein the bioactive fraction is obtained from an extract in methanol:chloroform of 1:1.
10. A fraction as claimed in claim 5 wherein the plant part is the root.
- 20 11. A fraction as claimed in claim 1 wherein the bioactive fraction from extract is selected from the group consisting of neat butanol extract, methanol:chloroform (1:1) extract, neat methanol extract, methanol:water (1:1) extract, pure water extract.
12. A fraction as claimed in claim 11 wherein the yields of the bioactive fraction comprises 10%, 13%, 51%, 10% and 9% respectively.
- 25 13. A process for the preparation of a bioactive fraction from extracts of halophytic plant of *Salicornia* species useful as anti tubercular agent which comprises
 - (a) collection of the halophytic plant at fully maturity stage
 - (b) washing the plant with tap water followed by deionised water
 - (c) removing extraneous matter, separation and processing of the plant to obtain plant parts
 - 30 (d) drying, chopping and pulverizing the plant parts to a mesh size ranging from 16-20
 - (e) soaking the dried, chopped and pulverized plant parts in a solvent and extracting all soluble matter to obtain an extract,

- (f) concentrating the extract
 - (g) freeze drying the concentrated extract to get a solid residue
 - (h) fractionating the solid residue to obtain a bioactive fraction.
14. A process as claimed in claim 13 wherein the *Salicornia* species comprises of *Salicornia brachiata*.
15. A process as claimed in claim 14 wherein the *Salicornia brachiata* is a fully matured plant.
16. A process as claimed in claim 13 wherein the extract comprises extracts from parts of *Salicornia* plant selected from the group consisting of whole plant without root, roots, spikes, husk and seeds.
17. A process as claimed in claim 13 wherein the solvent is selected from the group consisting of 100% water, alcohol and alcohol-water mixtures.
18. A process as claimed in claim 17 wherein the alcohol is selected from methanol and butanol.
19. A process as claimed in claim 13 wherein the solvent comprises 100% deionized water.
20. A process as claimed in claim 17 wherein the alcohol-water mixture comprises methanol:water in a range of 95:5 to 1:1.
21. A process as claimed in claim 13 wherein the bioactive fraction from extract is selected from the group consisting of neat butanol extract, methanol:chloroform (1:1) extract, neat methanol extract, methanol:water (1:1) extract, pure water extract, chloroform extract or a mixture thereof.
22. A process as claimed in claim 21 wherein the yields of the bioactive fraction comprises 10%, 13%, 51%, 10% and 9% respectively.
23. A process as claimed in claim 13 wherein the plant part is the root.
24. A process as claimed in claim 21 wherein the water fraction is obtained at a temperature in the range of 80 - 90°C.
25. A process as claimed in claim 13 wherein the fractionation is carried out at ambient temperature.
26. A process as claimed in claim 13 wherein the plant material is washed and dried at a temperature in the range of 20 to 35°C till the moisture content is in the range of 0.5 to 1.5 percent.

27. A process as claimed in claim 13 wherein the pulverized material is soaked in deionised water and heated on water bath in the temperature range 80 to 90°C for a period of 72-120 hours.
28. A process as claimed in claim 13 wherein the extract solution is concentrated at a 5 temperature range of 45 to 55°C or at ambient temperature through aqueous herbal concentrator.
29. A process as claimed in claim 13 wherein the concentrated extract is freeze dried in the temperature range of -50 to -60°C for a period of 8 to 16 hours.
30. A process as claimed in claim 13 wherein the extract is fractionated in solvent mixtures 10 having different polarity.
31. Use of a bioactive fraction obtained from an extract of *Salicornia* species as an antitubercular agent.
32. Use as claimed in claim 31, wherein the *Salicornia* species comprises of *Salicornia brachiata*.
33. Use as claimed in claim 32, wherein the *Salicornia brachiata* is a fully matured plant.
34. Use as claimed in claim 31, wherein the extract comprises extracts from parts of *Salicornia* plant selected from the group consisting of whole plant without root, roots, spikes, husk and seeds.
35. Use as claimed in claim 31, wherein the extract comprises an aqueous plant extract with 20 100% deionized water.
36. Use as claimed in claim 31, wherein the extract comprises an alcohol extract.
37. Use as claimed in claim 36, wherein the alcohol is selected from methanol and butanol.
38. Use as claimed in claim 31, wherein the bioactive fraction is obtained from an extract of *Salicornia brachiata* in methanol:water in a range of 95:5 to 1:1.
39. Use as claimed in claim 31, wherein the bioactive fraction is obtained from an extract in 25 methanol:chloroform of 1:1.
40. Use as claimed in claim 31, wherein the plant part is the root.
41. Use as claimed in claim 31, wherein the bioactive fraction from extract is selected from the group consisting of neat butanol extract, methanol:chloroform (1:1) extract, neat 30 methanol extract, methanol:water (1:1) extract, pure water extract.
42. Use as claimed in claim 41, wherein the yields of the bioactive fraction comprises 10%, 13%, 51%, 10% and 9% respectively.

43. Use as claimed in claim 31, wherein the bioactive fraction is used in an amount of 6.25 to 80 μ g/ml for antitubercular activity.
44. A method for the treatment of tuberculosis comprising administering to a subject suffering therefrom, a pharmaceutically effective amount of an antitubercular fraction obtained from *Salicornia* species.
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45. A method as claimed in claim 44 wherein the method comprises administering either bioactive fraction or the crude extract of *Salicornia* species to the subject.
46. A method as claimed in claim 44 wherein the *Salicornia* species comprises of *Salicornia brachiata*.
- 10 47. A method as claimed in claim 46 wherein the *Salicornia brachiata* is a fully matured plant.
48. A method as claimed in claim 44 wherein the extract comprises extracts from parts of *Salicornia* plant selected from the group consisting of whole plant without root, roots, spikes, husk and seeds.
- 15 49. A method as claimed in claim 44 wherein the extract comprises an aqueous plant extract with 100% water.
50. A method as claimed in claim 44 wherein the extract comprises an alcohol extract.
51. A method as claimed in claim 50 wherein the alcohol is selected from methanol and butanol.
- 20 52. A method as claimed in claim 44 wherein the bioactive fraction is obtained from an extract of *Salicornia brachiata* in methanol: water in a range of 95:5 to 1:1.
53. A method as claimed in claim 44 wherein the bioactive fraction is obtained from an extract in methanol:chloroform of 1:1.
54. A method as claimed in claim 44 wherein the plant part is the root.
- 25 55. A method as claimed in claim 44 wherein the bioactive fraction from crude extract is selected from the group consisting of neat butanol extract, methanol:chloroform (1:1) extract, neat methanol extract, methanol:water (1:1) extract, pure water extract.
56. A method as claimed in claim 55 wherein the yields of the bioactive fraction comprises 10%, 13%, 51%, 10% and 9% respectively.
- 30 57. A method as claimed in claim 44 wherein the bioactive fraction is used in an amount of 20 to 80 μ g/ml.
58. A method as claimed in claim 44 wherein the aqueous extract of *Salicornia brachiata* root part shows MIC of 50 μ g/ml against *Mycobacterium tuberculosis*, H37Rv.

59. A method as claimed in claim 44 wherein one or more fractions of *Salicornia* species are administered to the subject and show activity against *Mycobacterium tuberculosis* H37Rv and show MIC of 25 µg/ml.
60. A method as claimed in claim 44 wherein the butanol fraction, methanol:chloroform (1:1) fraction and the methanol fraction show up to 75% inhibition in growth of *Mycobacterium tuberculosis* H37Rv at a dose of 6.25 µg/ml.
61. A method as claimed in claim 44 wherein the fraction is administered in a form selected from tablets, lozenges, capsules, powder, solution, intravenously and orally.
62. A composition containing a bioactive fraction isolated from extracts of *Salicornia* species, mixed with pharmaceutically acceptable additives.
- 10 63. A composition as claimed in claim 62 wherein the *Salicornia* species comprises of *Salicornia brachiata*.
64. A composition as claimed in claim 63 wherein the *Salicornia brachiata* is a fully matured plant.
- 15 65. A composition as claimed in claim 62 wherein the extract comprises extracts from *Salicornia* plant part selected from the group consisting of whole plant without root, roots, spikes, husk and seeds.
66. A composition as claimed in claim 62 wherein the extract comprises an aqueous plant extract with 100% water.
- 20 67. A composition as claimed in claim 62 wherein the extract comprises an alcohol extract.
68. A composition as claimed in claim 67 wherein the alcohol is selected from methanol and butanol.
69. A composition as claimed in claim 62 wherein the bioactive fraction is obtained from an extract of *Salicornia brachiata* in methanol: water in a range of 95:5 to 1:1.
- 25 70. A composition as claimed in claim 62 wherein the bioactive fraction is obtained from an extract in methanol:chloroform of 1:1.
71. A composition as claimed in claim 70 wherein the plant part is the root.
72. A composition as claimed in claim 62 wherein the bioactive fraction from extract is selected from the group consisting of neat butanol extract, methanol:chloroform (1:1) extract, neat methanol extract, methanol:water (1:1) extract, pure water extract.
- 30 73. A composition as claimed in claim 62 wherein the composition is in a form selected from the group consisting of a tablet, lozenge, solution, capsules, powder and solution.